

Experiment Number: 632148

Test Type: **Genetic Toxicology - Bacterial  
Mutagenicity**

**G06: Ames Summary Data**

Test Compound: **AF-2**

CAS Number: **3688-53-7**

Date Report Requested: **09/10/2018**

Time Report Requested: **22:24:10**

**NTP Study Number:**

632148

**Study Result:**

Positive

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**G06: Ames Summary Data**

Date Report Requested: 09/10/2018

Test Type: **Genetic Toxicology - Bacterial  
Mutagenicity**Test Compound: **AF-2**

Time Report Requested: 22:24:10

**Strain: TA100**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>
Vehicle Control <sup>1</sup>	96 ± 2.8	95 ± 10.4	121 ± 6.1	110 ± 7.3	97 ± 3.5
0.001		103 ± 7.5	155 ± 4.7		
0.003		128 ± 7.1	226 ± 3.0		100 ± 11.2
0.01		177 ± 7.8	586 ± 9.6		88 ± 9.8
0.03	646 ± 19.1	391 ± 6.9	817 ± 10.4		112 ± 2.6
0.1	240 ± 23.3	555 ± 19.5	155 ± 7.1	621 ± 63.2	119 ± 11.9
0.3	0 ± 0.0 <sup>s</sup>			562 ± 24.5	200 ± 4.7
1.0	Toxic			208 ± 120.7	
3.0	Toxic			67 ± 67.0 <sup>s</sup>	
10.0				Toxic	
Trial Summary	Positive	Positive	Positive	Positive	Equivocal
Positive Control <sup>2</sup>				464 ± 5.2	491 ± 19.1
Positive Control <sup>3</sup>	348 ± 10.4	288 ± 2.0	481 ± 24.7		

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CAS Number: 3688-53-7

**Strain: TA100**

<b>Dose (ug/Plate)</b>	<b>With 10% Rat S9</b>	<b>With 10% Hamster S9</b>	<b>With 10% Hamster S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	101 ± 8.2	120 ± 7.0	101 ± 5.5	116 ± 9.0
0.001				
0.003			102 ± 5.8	
0.01	125 ± 7.6		107 ± 4.7	166 ± 11.6
0.03	159 ± 7.3		123 ± 7.4	196 ± 22.6
0.1	283 ± 11.0	409 ± 31.3	144 ± 10.5	380 ± 28.5
0.3	432 ± 20.7	502 ± 13.8	286 ± 10.3	440 ± 36.8
1.0	491 ± 22.3	386 ± 65.3		453 ± 13.1
3.0		300 ± 40.7 <sup>s</sup>		
10.0		0 ± 0.0 <sup>s</sup>		
Trial Summary	Positive	Positive	Positive	Positive
Positive Control <sup>2</sup>	372 ± 34.0	1067 ± 33.1	1071 ± 51.0	1419 ± 37.9
Positive Control <sup>3</sup>				

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Date Report Requested: 09/10/2018

Test Type: **Genetic Toxicology - Bacterial Mutagenicity**Test Compound: **AF-2**

Time Report Requested: 22:24:10

**Strain: TA1535**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>
Vehicle Control <sup>1</sup>	23 ± 4.0	20 ± 3.7	9 ± 1.5	5 ± 0.3	6 ± 0.9
0.001		21 ± 4.5			
0.003		16 ± 0.3		9 ± 2.6	
0.01		19 ± 3.8		9 ± 2.1	10 ± 3.3
0.03	14 ± 2.6	13 ± 3.5		6 ± 0.7	7 ± 0.7
0.1	5 ± 0.9	15 ± 1.8	7 ± 2.5	6 ± 0.6	9 ± 3.1
0.3	Toxic		10 ± 2.3	5 ± 0.0	9 ± 2.4
1.0	Toxic		5 ± 0.9		8 ± 2.3
3.0	Toxic		4 ± 1.2 <sup>s</sup>		
10.0			2 ± 1.5 <sup>s</sup>		
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>3</sup>	366 ± 31.1	282 ± 15.0			
Positive Control <sup>4</sup>			257 ± 29.8	136 ± 10.9	132 ± 3.8

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Test Compound: AF-2

CAS Number: 3688-53-7

Date Report Requested: 09/10/2018

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**Strain: TA1535**

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<b>Dose (ug/Plate)</b>	<b>With 10% Hamster S9</b>	<b>With 10% Hamster S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	7 ± 0.3	7 ± 0.9	10 ± 3.1
0.001			
0.003		7 ± 1.0	
0.01		8 ± 1.0	13 ± 4.3
0.03		8 ± 1.2	8 ± 1.3
0.1	4 ± 1.2	8 ± 2.0	10 ± 2.3
0.3	7 ± 0.9	5 ± 1.0	7 ± 1.2
1.0	4 ± 1.2		10 ± 2.8
3.0	2 ± 1.5 <sup>s</sup>		
10.0	0 ± 0.0 <sup>s</sup>		
Trial Summary	Negative	Negative	Negative
Positive Control <sup>3</sup>			
Positive Control <sup>4</sup>	452 ± 6.0	331 ± 20.1	382 ± 18.9

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Test Type: **Genetic Toxicology - Bacterial  
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CAS Number: 3688-53-7

**Strain: TA1537**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>
Vehicle Control <sup>1</sup>	3 ± 0.7	7 ± 1.8	6 ± 1.5	6 ± 1.5	7 ± 0.9
0.001		5 ± 1.0			
0.003		3 ± 0.7		4 ± 1.3	
0.01		10 ± 2.0		3 ± 0.6	7 ± 2.1
0.03	11 ± 1.3	9 ± 0.6		5 ± 1.2	5 ± 1.3
0.1	3 ± 1.2	12 ± 1.5	7 ± 0.0	5 ± 0.9	5 ± 1.5
0.3	Toxic		14 ± 2.8	5 ± 0.9	14 ± 1.5
1.0	Toxic		13 ± 2.1		7 ± 0.7
3.0	Toxic		0 ± 0.0 <sup>s</sup>		
10.0			0 ± 0.0 <sup>s</sup>		
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>4</sup>			160 ± 22.2	141 ± 12.3	123 ± 3.9
Positive Control <sup>5</sup>	241 ± 23.8	178 ± 49.6			

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Test Compound: AF-2

CAS Number: 3688-53-7

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**Strain: TA1537**

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	5 ± 1.0	5 ± 2.0	5 ± 1.2
0.001			
0.003		5 ± 2.5	
0.01		5 ± 0.3	7 ± 1.5
0.03		6 ± 0.9	5 ± 0.6
0.1	10 ± 2.7	6 ± 2.0	8 ± 0.6
0.3	15 ± 2.1	7 ± 1.8	8 ± 0.9
1.0	10 ± 1.0		9 ± 0.3
3.0	5 ± 0.9 <sup>s</sup>		
10.0	0 ± 0.0 <sup>s</sup>		
Trial Summary	Negative	Negative	Negative
Positive Control <sup>4</sup>	422 ± 28.3	224 ± 47.5	519 ± 11.2
Positive Control <sup>5</sup>			

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Test Type: **Genetic Toxicology - Bacterial Mutagenicity**Test Compound: **AF-2**

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CAS Number: 3688-53-7

**Strain: TA98**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>
Vehicle Control <sup>1</sup>	14 ± 1.2	15 ± 1.2	15 ± 1.2	22 ± 2.0	22 ± 4.4
0.001		11 ± 1.3	17 ± 0.3		
0.003		23 ± 5.0	38 ± 2.5		22 ± 1.7
0.01		33 ± 4.8	108 ± 10.0		19 ± 2.7
0.03	155 ± 3.8	105 ± 2.1	254 ± 7.4		21 ± 2.3
0.1	229 ± 37.7	162 ± 9.8	73 ± 9.4	82 ± 6.5	26 ± 3.1
0.3	0 ± 0.0 <sup>s</sup>			232 ± 27.5	44 ± 4.6
1.0	Toxic			181 ± 47.6	
3.0	Toxic			0 ± 0.0 <sup>s</sup>	
10.0				0 ± 0.0 <sup>s</sup>	
Trial Summary	Positive	Positive	Positive	Positive	Equivocal
Positive Control <sup>6</sup>			411 ± 13.7		418 ± 14.2

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Time Report Requested: 22:24:10

CAS Number: 3688-53-7

**Strain: TA98**

<b>Dose (ug/Plate)</b>	<b>With 10% Rat S9</b>	<b>With 10% Hamster S9</b>	<b>With 10% Hamster S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	25 ± 3.5	24 ± 2.0	22 ± 1.7	33 ± 4.7
0.001				
0.003			20 ± 2.3	
0.01	25 ± 3.0		25 ± 1.3	27 ± 6.2
0.03	32 ± 2.0		29 ± 6.9	37 ± 6.1
0.1	61 ± 5.2	72 ± 11.2	36 ± 8.6	87 ± 1.8
0.3	99 ± 4.3	161 ± 14.4	54 ± 7.5	135 ± 2.3
1.0	183 ± 20.3	156 ± 14.4		145 ± 11.5
3.0		40 ± 14.5 <sup>s</sup>		
10.0		0 ± 0.0 <sup>s</sup>		
Trial Summary	Positive	Positive	Positive	Positive
Positive Control <sup>6</sup>	1012 ± 54.6	926 ± 57.1	1278 ± 62.6	Positive Control <sup>2</sup> Positive Control <sup>7</sup>

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### **LEGEND**

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Values given as Mean or Mean  $\pm$  Standard Error Mean

The number of samples = 3, unless samples marked toxic or contaminated were excluded from mean and SEM calculations

CAS Number = Chemical Abstracts Service registry number

1: Vehicle Control: Dimethyl Sulfoxide

2: 1.0 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate Sodium Azide

4: 2.5 ug/Plate 2-Aminoanthracene

5: 50.0 ug/Plate 9-Aminoacridine

6: 0.0 ug/Plate 2-Aminoanthracene

7: 5.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**\*\* END OF REPORT \*\***